

IMPROVED GAS FLOW FOR PLASMA ARC TORCH

ABSTRACT OF THE DISCLOSURE

A plasma arc torch and method are provided for directing a flow of gas substantially the length of an electrode before splitting the gas into a primary flow and a secondary flow. The torch includes an electrode having a metallic holder defining a plurality of openings at a forward end for directing all of the gas therethrough and into a chamber defined by the holder and a nozzle. The nozzle defines a central bore and a plurality of secondary openings for splitting the gas in the nozzle chamber into at least the primary flow and the secondary flow.

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